IC 2003-1 TO AFI 11-2E-8 VOLUME 3 – E-8 OPERATIONS PROCEDURES

12 DECEMBER 2003

SUMMARY OF REVISONS

This Interim Change (IC) updates Paragraph 3.4.1.1 minimum crew rest to apply to deployment/redeployment missions only. Paragraph 3.9 Flying Clothing added gloves to taxi and ERCC procedures. Paragraph 4.3.8 Multiple Full Stop Landings incorporates ACC/DO brake energy waiver from 10 million ft-lbs to 40 million ft-lbs. 4.3.10 Aircraft Category added. First Pilot (FP) restrictions were added to paragraphs 4.4.2.2 and 4.7.1. Paragraph 4.5.4 through 4.5.8 adds RNP 10/BRNAV procedures. Paragraphs 4.5.9 through 4.5.12 add RVSM procedures. Table 4.1 is replaced, incorporating guidance for AC touch and go's, copilot AR, FP restrictions, and removing crosswind restrictions from SEFTOCs and low approaches. Paragraph 4.12 Formation Restrictions is reworded for clarity.

OPR: HQ ACC/DOYA (Maj Mark Burnette)

- ★3.4.1.1. Due to the long flights and numerous time zone changes involved in flying to and from overseas locations, ground time between landing and subsequent takeoff will not be planned for less than 18 hours, unless waived by OG/CC or equivalent. This ground time does not apply to "Op Stops" made within an aircrew duty period.
- ★3.9. Flying Clothing. Minimum requirements will be determined IAW AFI 11-301, *Aircrew Life Support (ALS) Program*. All crewmembers will wear nomex flying gloves during engine start, taxi, takeoff, landing, ERCC, and when performing emergency procedures. Flight gloves may be removed when they hinder completion of required duties.
- ★4.3.8. Multiple Full Stop Landings. The FE will determine the brake energy used during landing and then using the decision speed (V1), without headwind correction, determine the brake energy for an abort during a subsequent takeoff. Do not takeoff until the combined energy after ground cooling is less than 40 million ft-lbs. If takeoff is made with brake energy above 10 million ft-lbs., air-cooling procedures will be followed.
- ★4.3.10. Aircraft Category. The E-8 is a category D aircraft. Some landing configurations and gross weight combinations will require the use of category E minimums. Refer to Flip GP for guidance.
- ★4.4.2.2. FP's will not be designated as PIC. However, they may occupy the left seat without IP supervision.
- ★4.5.4. Required Navigation Performance (RNP Airspace). Airspace where RNP is applied is considered special qualification airspace. The E-8 is approved for operation in RNP airspace with operational limitations based on navigational equipment.

- ★4.5.4.1. RNP-10 compliance includes navigation accuracy within 10 NM of actual position 95 percent of the time. The E-8 may operate in RNP-10 airspace when the following conditions are met:
- ★4.5.4.1.1. The "INU-only" navigation mode is selected for the steering solution. Other Navigation Modes may not be used for operations in RNP-10 airspace.
- ★4.5.4.1.2. Updates will be IAW RNP/BRNAV update and contingency procedures in this volume.
- ★4.5.5. Basic Area Navigation (BRNAV) and RNP-5 Airspace. Compliance includes navigation accuracy within 5NM of actual position 95 percent of the time. BRNAV navigation accuracy criteria is RNP-5. Aircraft may operate in BRNAV/RNP-5 airspace when the following conditions are met:
- ★4.5.5.1. The "INU-only" or the INU with manual in-flight updating or point to point navigation using the flight management system (FMS) shall be the only navigation modes used for operations in BRNAV airspace.
- ★4.5.5.2. Should NAVAIDS become unavailable, either through radio failure or denial, the "INU-only" solution cannot be used longer than 7.5 hours from the time the INUs were commanded to the NAV mode or the last update, whichever is later. Refer to RNP-10/BRNAV Update and Contingency Procedures in this volume.
- ★4.5.5.3. Updates will be IAW RNP/BRNAV update and contingency procedures in this volume.
- ★4.5.6 RNP-10/BRNAV Update and Contingency Procedures.
- ★4.5.6.1. Aircraft must exit RNP-10/BRNAV airspace 7.5 hours after the INU systems were placed in NAV mode after either a full gyrocompass ground alignment or an inflight update.
- ★4.5.6.2 An in-flight update may be conducted on one INU at a time within coverage of an FAA/CAA approved radio-NAVAID.
- ★4.5.6.3. The resulting update must provide a position that agrees with the position provided by the radio-NAVAID plus or minus 0.3 NM.
- ★4.5.6.4. After the first INU successfully completes an in-flight update and its position accuracy is verified, the second INU may be updated and its position compared to the first INU, or the radio-NAVAID.
- ★4.5.7. RNP/BRNAV Flight Planning. The PIC will review airspace requirements (i.e. specific RNP level and contingency actions, etc), verify the aircraft is approved for

- RNP/BRNAV operation, and assess mission impact when flying in RNP-10/BRNAV airspace.
- ★4.5.7.1. Enroute. Both INUs must be operational at the RNP-10/BRNAV entry point. Periodic crosschecks will be accomplished to identify navigation errors and prevent inadvertent deviation from ATC cleared routes. Advise ATC of the deterioration or failure of navigation equipment below navigation performance requirements and coordinate appropriate actions.
- ★4.5.8. Post Flight. Document in AFTO Form 781 malfunctions or failures of RNP/BRNAV required equipment, including the failure of this equipment to meet RNP/BRNAV tolerances.
- ★4.5.9. Reduced Vertical Separation Minimum (RVSM) Airspace. Airspace where RVSM is applied is considered special qualification airspace. Both the aircrew and the specific aircraft must be approved for operations in these areas. These specific E-8's are approved for unrestricted use in the full RVSM envelope. Refer to FLIP GP and the following guidance for RVSM requirements:
- ★4.5.10. RVSM Equipment. Both primary altimeters, the autopilot (to include the altitude hold function), the altitude alerter, and the IFF transponder must be fully operational before entry into RVSM airspace. Should any of this equipment fail before entering RVSM airspace, request a new clearance so as to avoid this airspace.
- ★4.5.10.1. Autopilot. The autopilot shall be engaged during level cruise except when circumstances such as the need to re-trim the aircraft or turbulence procedures require disengagement.
- ★4.5.10.2. Altimeters. Crosscheck the altimeters (STBY to RESET) before or immediately upon entry to RVSM airspace. The PIC will ensure that readings of all altimeters are recorded and retained for use in contingency situations.
- ★4.5.10.3. Should any of the required equipment fail after entry into RVSM airspace, immediately notify ATC and coordinate a plan of action.
- $\pm 4.5.11$. RVSM Operations. Continuously monitor systems and crosscheck altimeters to ensure they agree ± 200 ft.
- ★4.5.11.1. Aircrews should limit climb and descent rates to 1,000 feet per minute when operating in the vicinity of other aircraft to reduce potential effects on TCAS operations.
- ★4.5.12 Post Flight. Document (in the AFTO Forms 781) malfunctions or failures of RVSM required equipment, including the failure of this equipment to meet RVSM tolerances.

★4.7.1. First Pilot (FP) Restrictions. FP's will comply with AC restrictions. Exception: Items identified by the OG/CC during initial placement in FP status will not be accomplished without IP supervision.

★Table 4.1. Maneuvers Authorized for Qualification and Continuation Training.

MANEUVER	POSITION	RESTRICTIONS
★ Touch-and-Go	IP/AC/CP	1, 2, 5, 7, 8, 18
★Approach and Landing, Sim Engine Out	IP/AC	3, 6, 7, 8, 9, 10, 16, 18
Approach and Go Around, Sim Engine Out	IP/AC	3, 7, 8, 9, 10, 15, 16
★Tactical Arrivals and Departures (TAAD)	IP/AC	4
Air Refueling Envelope Limits Demo	IP/D	13
★SEFTOC	IP/D	3, 7, 8, 9, 11, 15, 16
Spoiler/Lateral Control Demo	IP/D	12, 15
Unusual Attitude Recoveries	IP/D	9, 7, 12, 15, 16, 17
★14/25 Flap Touch-and-Go	IP/D	1, 7, 8, 18
★ Landing Attitude Demonstration	IP/D	1, 7, 8, 14, 18
Copilot Air Refueling	СР	5

KEY:

IP/AC – Instructor Pilot or Aircraft Commander

IP/D – Direct IP supervision is required (IP at the controls)

CP- Copilot

RESTRICTIONS:

- 1. IP: $200 / \frac{1}{2}$, 2400 RVR or lowest suitable approach minimums, whichever is higher, RCR of 10 or greater (precipitation not moderate to heavy). Runway must be free of snow, ice slush, and standing water (no RSC).
- 2. AC/CP: Day, 1000/3, RCR 23, home station only. Airfields other than home station require SQ/CC approval.
- 3. Day: Circling Minimums. Night: 1000/2 or circling minimums, whichever is higher.
- \star 4. Wx: 5000/3; Certified on Letter of X's.
- ★5. IAW AFI 11-2E-8 Volume 1, Chapter 7
- 6. Flaps 40 or 50 only. IP- Simulated three-engine touch, four engine go permitted. AC Simulated three- engine full-stop only.
- 7. No passengers aboard (see AFI 11-401 and MAJCOM supplement).
- 8. 9,000' x 135' or minimum runway length and width required to make a safe, normal, full-stop landing, whichever is higher. Gross Weight 247,000 lbs. or less.
- 9. IP/AC must make public address call prior to initiating. If multiple maneuvers are to be accomplished, one public address call is sufficient for the series.

- 10. Initiate planned go-around at DH (if applicable) or 200 feet AGL, whichever is higher. If an unplanned go-around or missed approach is required, symmetrical thrust on all four engines will be used as soon as practical.
- 11. Do not retard the throttle for SEFTOC prior to reaching 200' AGL minimum.
- 12. Inflight requirements: IP must be at flight controls. Initiated and completed above 10,000 feet AGL. Aircraft must maintain day/VMC conditions. Bank angle will not exceed 30 degrees; pitch attitude will not exceed 15 degrees high or low. Compute MCT prior to initiating maneuver.
- 13. IP must be at a set of flight controls. Tanker must have positive boom disconnect capability. Limits are as follows:

Left/Right—8 degrees (KC-135); 18 degrees (KC-10)

Up/Down—22 and 38 respectively

In/Out— 8/16 (KC-135); 19 feet extension (KC-10)

- 14. Four engine only. Normally notify the SOF of intentions. Initiate go around no less than 3000 ft of runway remaining.
- 15. WST is primary for accomplishment.
- 16. No minimum essential ground personnel (MEGP) onboard.
- 17. Not permitted during spouse orientation flights.
- ★18. Maximum Crosswind 15 knots (IP), 10 knots (AC/CP).
- ★4.12. Formation Restrictions. E-8 will not fly in formation with other heavy aircraft for purposes other than air refueling.